| 0/84/ |
|--|
| N 06 JAN 2003 |
| 06 JAN 2003 PLU=ON KLVF/SQSP LU=ON L1 LU=ON L2 AND (AD(S)ALZHEIMER?) (DISEAS? OR DISORDER)) LU=ON L3 AND (TREAT? OR |
| TROL?) LU=ON L4 AND (VACCIN? OR |
| PLU=ON KLVF/SQSP LU=ON L1 LU=ON L2 AND ((AD(10A)ALZHEIME D(3A)(DISEAS? OR DISORDER))(5A) ENT? OR CONTROL?)) LU=ON L6 AND (VACCIN? OR |
| |
| 03 ACS LUS ptide fragment linked epitope for prevention Alzheimer's , Inc., USA |
| |

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | ENT | NO. | | KI | ND | DATE | | | A | PPLI | CATIO | N NC | ο. | DATE | | |
|-------|------|-----|------|-------|------|-------|------|-----|------------------------|------|-------|------|-----|------|------|-----|
| | | | | | | | | | | | | | | | | |
| WO | 2002 | | | | 2 | 2002 | 1205 | | WO 2002-US10293 200204 | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | ΑT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, |
| | | GD, | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KΕ, | KG, | KΡ, | KR, |
| | | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, |
| | | MZ, | NO, | NZ, | OM, | PH, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, |
| | | ТJ, | TM, | TN, | TR, | TT, | ΤZ, | UA, | UG, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, |
| | | AZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | | | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZM, | ZW, | ΑT, | BE, |
| | | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙT, | LU, | MC, | NL, | PT, |
| | | SE, | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, |
| | | SN, | TD, | TG | | | | | | | | | | | | |
| ORITY | APP | LN. | INFO | . : | | | | | US 2 | 001- | 8652 | 94 | Α | 2001 | 0525 | |
| mb o | | + | 4 | onti. | an 2 | 01 a+ | 00 + | | aama | n 0 | omor | iein | m = | nent | i de | |

PRIC AΒ The present invention relates to a compn. comprising a peptide

> 308-4994 Searcher : Shears

immunogen useful for the prevention and treatment of Alzheimer's Disease. More particularly, the peptide immunogen comprises a main functional/regulatory site, an N-terminal fragment of Amyloid .beta. (A.beta.) peptide linked to a helper T cell epitope (Th) having multiple class II MHC binding motifs. The peptide immunogen elicit a site-directed immune response against the main functional/regulatory site of the A.beta. peptide and generate antibodies, which are highly cross-reactive to the sol. A.beta.1-42 peptide and the amyloid plaques formed in the brain of Alzheimer's Disease patients. The antibodies elicited being cross reactive to the sol. A.beta.1-42 peptide, promote fibril disaggregation and inhibit fibrillar aggregation leading to immunoneutralization of the "sol. Asz-derived toxins"; and being cross-reactive to the amyloid plaques, accelerate the clearance of these plaques from the brain. Thus, the compn. of the invention comprising the peptide immunogen is useful for the prevention and treatment of Alzheimer's Disease.

109770-29-8P 477826-92-9P 477826-93-0P 477826-96-3P

> RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(amyloid .beta. peptide fragment linked to helper T cell epitope for prevention and treatment of Alzheimer's disease)

ANSWER 2 OF 29 HCAPLUS COPYRIGHT 2003 ACS 2002:864789 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

137:324199

TITLE:

Modeling Alzheimer's disease immune therapy mechanisms:

interactions of human postmortem microglia with

antibody-opsonized amyloid beta

peptide

AUTHOR(S):

Lue, Lih-Fen; Walker, Douglas G.

CORPORATE SOURCE:

Sun Health Research Institute, Sun City, AZ,

85351, USA

SOURCE:

Journal of Neuroscience Research (2002), 70(4),

599-610

CODEN: JNREDK; ISSN: 0360-4012

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE:

Journal LANGUAGE: English

The induction of an antibody response to amyloid .beta. AΒ (A.beta.) peptide has become a strategy for the ${\tt treatment}$ of Alzheimer's disease (AD). This has proven effective in reducing the plaque burden in transgenic mice that develop A.beta. plaques similar to human AD patients. The mechanism for enhanced clearance of A.beta. is partly due to the interaction of Iq Fc.gamma. receptor-expressing microglia and specific antibody-opsonized A.beta. deposits. This interaction can stimulate Fc.gamma. receptor-mediated phagocytosis, but also results in inflammatory activation of these cells. Consequently, interaction of microglia with antibody-antigen complexes could exacerbate the existing inflammation in the brains of AD patients. Here, the authors used substrate-bound A.beta. and cultured human microglia from AD and non-demented cases to model interaction of

microglia and antibody-opsonized plaques in AD brains. Enhanced prodn. of tumor necrosis factor-.alpha., macrophage colony stimulating factor, interleukin-10, and superoxide ions was detected. The authors also demonstrated enhanced uptake of opsonized A.beta. by microglia, which was reduced in the presence of excess IgG, indicative of the involvement of Fc.gamma. receptor-mediated mechanisms. Human microglia were shown here to express mRNA for Fc.gamma. receptors I, IIa, IIb, and III. The expression of Fc.gamma. receptor II was augmented by proinflammatory stimulation. Thus, initial interactions of human microglia with antibody-opsonized amyloid could result in increased inflammation. The consequence of this on inflammatory pathol. in AD brains needs to be considered before immunization is used as a strategy for treating AD.

107761-42-2, Amyloid .beta.(1-42)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (antibody-opsonized; Fc.gamma. receptor-mediated human postmortem microglia interaction with antibody-opsonized amyloid .beta. peptide in Alzheimer's disease model

in relation to inflammation induction and immunotherapy)

REFERENCE COUNT: 43

THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

ANSWER 3 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:831601 HCAPLUS

DOCUMENT NUMBER: 138:3442

Generation of antibodies specific for .beta.-TITLE:

> amyloid by vaccination of patients with Alzheimer

disease

Hock, Christoph; Konietzko, Uwe; AUTHOR(S):

Papassotiropoulos, Andreas; Wollmer, Axel; Streffer, Johannes; von Rotz, Ruth C.; Davey,

Gabriela; Moritz, Eva; Nitsch, Roger M.

Division of Psychiatry Research, University of CORPORATE SOURCE:

Zurich, Zurich, Switz.

Nature Medicine (New York, NY, United States) SOURCE:

(2002), 8(11), 1270-1275

CODEN: NAMEFI; ISSN: 1078-8956

Nature Publishing Group PUBLISHER:

DOCUMENT TYPE: Journal English LANGUAGE:

To characterize antibodies produced in humans in response to AB A.beta.42 vaccination, the authors carried out immunohistochem. examns. of the brains of both transgenic mice and human patients with .beta.-amyloid pathol. The authors collected sera from patients with Alzheimer disease who received a primary injection of pre-aggregated A.beta.42 followed by one booster injection in a placebo-controlled study. Antibodies in immune sera recognized .beta.-amyloid plaques, diffuse A.beta. deposits, and vascular .beta.-amyloid in brain blood The antibodies did not cross-react with native full-length vessels. .beta.-amyloid precursor protein or its physiol. derivs., including sol. A.beta.42. Thus, vaccination of AD patients with A.beta.42 induces antibodies that have a high degree of selectivity for the pathogenic target structures. Whether vaccination to produce antibodies against .beta.-amyloid will halt the cognitive

> Shears 308-4994 Searcher :

decline in AD will depend upon clin. assessments over time.

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107761-42-2, Glycopeptide (human clone 9-110 amyloid
IT
     A4 peptide moiety)
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (pre-aggregated; antibodies formation to .beta.-amyloid
        by vaccination of Alzheimer's disease
        patients with amyloid .beta.42 peptide)
                                 THERE ARE 30 CITED REFERENCES AVAILABLE
REFERENCE COUNT:
                           30
                                 FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                 IN THE RE FORMAT
     ANSWER 4 OF 29 HCAPLUS COPYRIGHT 2003 ACS
rs
ACCESSION NUMBER:
                           2002:555371 HCAPLUS
DOCUMENT NUMBER:
                           137:139348
                          Molecular antigen array for vaccines
TITLE:
                           against infectious disease, cancer, allergies
                           and autoimmune diseases
                           Maurer, Patrick; Lechner, Franziska; Ortmann,
INVENTOR(S):
                           Rainer; Lueoend, Rainer; Staufenbiel, Matthias;
                           Frey, Peter; Renner, Wolfgang A.; Bachmann,
                           Martin; Tissot, Alain; Sebbel, Peter; Piossek,
                           Christine
PATENT ASSIGNEE(S):
                           Cytos Biotechnology A.-G., Switz.; Novartis
                           Pharma A.-G.
                           PCT Int. Appl., 418 pp.
SOURCE:
                           CODEN: PIXXD2
                           Patent
DOCUMENT TYPE:
                           English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                           2
PATENT INFORMATION:
                                              APPLICATION NO. DATE
                       KIND DATE
     PATENT NO.
                       ____
                             _____
                                             _____
     ______
                                        WO 2002-IB168 20020121
     WO 2002056907
                      A2
                             20020725
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
              TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
              SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
              SN, TD, TG
PRIORITY APPLN. INFO.:
                                           US 2001-262379P P
                                                                20010119
                                           US 2001-288549P
                                                            Ρ
                                                                20010504
                                           US 2001-326998P
                                                             Ρ
                                                                20011005
                                           US 2001-331045P
                                                             Р
                                                                20011107
     The present invention is related to the fields of mol. biol.,
AB
     virol., immunol. and medicine. The invention provides a compn.
     comprising an ordered and repetitive antigen or antigenic
     determinant array. The invention also provides a process for
     producing an antigen or antigenic determinant in an ordered and
     repetitive array. The ordered and repetitive antigen or antigenic
     determinant is useful in the prodn. of vaccines for the
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Searcher: Shears 308-4994

treatment of infectious diseases, the treatment of

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allergies and as a pharmaccine to prevent or cure cancer
    and to efficiently induce self-specific immune responses, in
    particular antibody responses.
    107761-42-2, Amyloid .beta. 1-42
IT
    444309-74-4
    RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (mol. antigen array for vaccines against infectious
        disease, cancer, allergies and autoimmune
        diseases)
     444137-68-2 444137-69-3 444137-70-6
IT
    RL: PRP (Properties)
        (unclaimed protein sequence; mol. antigen array for
        vaccines against infectious disease, cancer, allergies
        and autoimmune diseases)
    ANSWER 5 OF 29 HCAPLUS COPYRIGHT 2003 ACS
                        2002:540135 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        137:108295
TITLE:
                        Vaccines comprising all-D fibril
                        peptides for prevention and
                        treatment of Alzheimer's and
                        amyloid-related diseases
                        Chalifour, Robert; Hebert, Lise; Kong, Xianqi;
INVENTOR(S):
                        Gervais, Francine
PATENT ASSIGNEE(S):
                        Can.
                        U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of
SOURCE:
                        U.S. Ser. No. 724,842.
                        CODEN: USXXCO
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                        _____
    _____
                     ____
                   A1
                                          US 2001-867847 20010529
                           20020718
    US 2002094335
                     A2
                                          WO 2002-CA763 20020529
                           20021205
    WO 2002096937
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
            LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
            NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
            TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
            CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
            SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
            SN, TD, TG
PRIORITY APPLN. INFO.:
                                       US 1999-168594P P 19991129
                                       US 2000-724842
                                                       A2 20001128
                                       US 2001-867847
                                                       A 20010529
    The present invention relates to a stereochem. based "non-self"
AΒ
    antigen vaccine for the prevention and/or
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Searcher: Shears 308-4994

treatment of Alzheimer's and other amyloid

vaccine for the prevention and treatment
of Alzheimer's and other amyloid related

related diseases. The present invention provides a

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diseases, which overcomes the drawbacks assocd. with using
     naturally occurring peptides, proteins or immunogens. The
     vaccine comprises fibril peptides consisting of all- D-amino
     acids.
     342877-52-5 342877-55-8 342877-58-1
     342877-61-6 342877-63-8 342877-66-1
     342877-69-4 342877-71-8 342877-73-0
     342877-74-1 342877-75-2 342877-97-8
     342878-00-6 342878-03-9 342878-06-2
     342878-09-5 442915-40-4
     RL: BSU (Biological study, unclassified); PRP (Properties); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (vaccines comprising all-D fibril peptides for
       prevention and treatment of Alzheimer
        's and amyloid-related diseases)
    ANSWER 6 OF 29 HCAPLUS COPYRIGHT 2003 ACS
                         2002:475976 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         137:383644
TITLE:
                         Patients with Alzheimer
                         disease have lower levels of serum anti-
                         amyloid peptide antibodies than healthy
                         elderly individuals
                         Weksler, Marc E.; Relkin, Norman; Turkenich,
AUTHOR(S):
                         Rimma; LaRusse, Susan; Zhou, Ling; Szabo, Paul
                         Department of Medicine, Weill Medical College of
CORPORATE SOURCE:
                         Cornell University, New York, NY, 10021, USA
                         Experimental Gerontology (2002), 37(7), 943-948
SOURCE:
                         CODEN: EXGEAB; ISSN: 0531-5565
                         Elsevier Science Inc.
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Active immunization with the human amyloid peptide
     (A.beta.42) or passive immunization with anti-A.beta.42
     antibodies protects mice that express a mutant human amyloid
     precursor protein (APP) transgene from cerebral amyloid deposits.
     If anti-A.beta.42 antibodies protect APP-transgenic mice, a model of
     Alzheimer's disease (AD), a high titer of
     anti-A.beta.42 antibodies may protect humans from AD. The
     titer of anti-A.beta.42 antibodies in serum from individuals with
     and without late onset AD was measured using an ELISA. The titer of
     Iq (IqM, IqG and IqA) and IqG anti-A.beta.42 peptide antibodies was
     significantly higher in serum from elderly controls than
     AD patients. Furthermore, IgG but not Ig anti-A.beta.42 antibodies
     distinguished sera from AD patients and elderly controls
     that did not have the apolipoprotein E4 allele. The low titer of
     anti-A.beta.42 antibodies in AD patients does not reflect the
     well-established, age-assocd. defect in the antibody response to
     most protein antigens, as there was no pos. correlation between the
     serum titer of anti-A.beta.42 antibodies and anti-influenza
     hemagglutinin antibodies induced by influenza vaccine in
     elderly humans. The lower titer of serum anti-A.beta.42 peptide
     antibodies in AD patients may reflect the reported specific
     impairment of helper T cell activity for B cells that produce
     anti-amyloid-.beta.42 peptide antibodies in APP-transgenic mice.
     107761-42-2, Glycopeptide (human clone 9-110 amyloid
```

AΒ

IT

A4 peptide moiety)

Searcher : Shears 308-4994

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(patients with **Alzheimer disease** have lower levels of serum anti-amyloid peptide antibodies than healthy elderly individuals)

REFERENCE COUNT:

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L8 ANSWER 7 OF 29 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:353475 HCAPLUS

20

DOCUMENT NUMBER: 136:363863

TITLE: Peptides for use in the treatment of

Alzheimer's disease

INVENTOR(S): Milton, Nathaniel Gavin Nicolas
PATENT ASSIGNEE(S): Insight Biotechnology Limited, UK

SOURCE: PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | PATENT | | KIND DATE | | | | | | PPLI | CATI | ο. | DATE | | | | |
|------|---------|-------|-----------|-------------|---------|------|------|-------|--------|-----------|--------|-------|----------|-------|------|-----|
| | WO 200 | 20366 | 14 | A2 20020510 | | | | | W | 20 | 01-G | 3 | 20011101 | | | |
| | W: | ΑĖ, | AG, | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FΙ, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, |
| | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | ΜZ, |
| | | NO, | NZ, | OM, | PH, | PL, | PT; | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, |
| | | TM, | TR, | TT, | TZ, | UA, | ŪG, | US, | UZ, | VN, | YU, | ZA, | ZW, | AM, | ΑZ, | ΒY, |
| | | KG, | ΚŹ, | MD, | RU, | ТJ, | TM | | | | | | | | | |
| | RW | : GH, | GM, | ΚE, | LS, | MW, | ΜZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZW, | ΑT, | BE, | CH, |
| | | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙΤ, | LU, | MC, | NL, | PT, | SE, |
| | | TR, | BF, | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, |
| | | TD, | ΤG | | | | | | | | | | | | | |
| | AU 200 | 20124 | 71 | A | 5 | 2002 | 0515 | | A | U 20 | 02-1 | 2471 | | 2001 | 1101 | |
| PRIO | RITY AP | PLN. | INFO | .: | | | | - | GB 2 | 000- | 2673 | 8 | Α | 2000 | 1101 | |
| | | | | | | | | | GB 2 | 000- | 2673 | 9 | Α | 2000 | 1101 | |
| | | | | | | | | 1 | WO 2 | 001-0 | GB48 | 43 | W | 2001 | 1101 | |
| 7 D | 7-+ | ~~~ ~ | + i | 400 | + h - + | 000 | rocn | and . | t - Λ, | m 1 7 1 ~ | : a_ 1 | hat a | nr | otaii | n | |

AB Antisense peptides that correspond to Amyloid-.beta. protein residues 1-43 are identified, and are used to identify protein binding sites on enzymes that interact with Amyloid-.beta.. The antisense peptides can be used as, or to identify,

therapeutic agents that prevent Amyloid

-.beta. cytotoxicity, and may be useful in the **treatment** of **Alzheimer's disease**. The antisense peptides show sequence similarity to the protein kinase cdc2, and it has now been found that the cytotoxic form of A.beta. is phosphorylated.

IT 422613-26-1

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(peptides for use in the **treatment** of **Alzheimer** 's disease)

L8 ANSWER 8 OF 29 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:332668 HCAPLUS

DOCUMENT NUMBER: 136:345817

TITLE: Methods and compositions for the treatment and/or diagnosis of

neurological diseases and disorders

INVENTOR(S): Solomon, Beka; Frenkel, Dan

PATENT ASSIGNEE(S): Israel

SOURCE: U.S. Pat. Appl. Publ., 75 pp., Cont.-in-part of

U.S. Ser. No. 629,971.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PA! | PATENT NO. | | | KIND DATE | | | | | | PPLI | | | | | | | |
|----------|------------|-----|------|-----------|-----|-----|-----|-----|------|----------------------------------|------|-----|-----|------|----------------------|-----|--|
| | 2002 | | | A: | _ | | | | | US 2001-808037 WO 2002-US8042 | | | | | 20010315 20020315 | | |
| ,,,, | W: | | | | | | | | | | | | | BZ, | | CH, | |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FI, | GB, | GD, | |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | |
| | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | ΜX, | MZ, | |
| | | NO, | NZ, | OM, | PH, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | |
| | | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | |
| | | AZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | | | | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | ΑT, | BE, | |
| | | CH, | CY, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙT, | LU, | MC, | NL, | PT, | |
| | | SE, | TR, | BF, | ΒJ, | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | |
| | | SN, | TD, | TG | | | | | | | | | | | | | |
| PRIORITY | APP | LN. | INFO | . : | | | | 1 | US 1 | 999- | 1524 | 17P | Ρ | 1999 | 0903 | | |
| | | | | | | | | 1 | US 1 | 999- | 4736 | 53 | A2 | 1999 | 1229 | | |
| | | | | | | | | 1 | US 2 | 000- | 6299 | 71 | A2 | 2000 | 0731 | | |
| | | | | | | | | 1 | US 2 | 001- | 8080 | 37 | A1 | 2001 | 0315 | | |
| | | | | | | | | | | | | _ | | | | | |

AB A method of immunizing against plaque-forming diseases using display technol. is provided. The method utilize novel agents, or pharmaceutical compns. for vaccination against plaque-forming diseases which rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compns. for vaccination against plaque-forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization. The methods of the present invention also generally relates to treating and/or diagnosing neurol. diseases and disorders of the central nervous, regardless of whether the disease or disorder is plaque-forming or non-plaque forming.

IT 419018-23-8

RL: PRP (Properties)

(unclaimed protein sequence; methods and compns. for treatment and/or diagnosis of neurol. diseases and disorders)

L8 ANSWER 9 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:332217 HCAPLUS

DOCUMENT NUMBER:

136:339487

TITLE:

Fusion proteins comprising .beta.amyloid peptide and heat shock protein

for immunization treatments

```
of Alzheimer's disease
                          Ghirardi, Silvia; Armani, Elisabetta; Amari,
INVENTOR(S):
                          Gabriele; Puccini, Paola; Imbimbo, Bruno;
                          Villetti, Gino
                          Chiesi Farmaceutici S.P.A., Italy; Ghirardi
PATENT ASSIGNEE(S):
                          Silvia
                          PCT Int. Appl., 33 pp.
SOURCE:
                          CODEN: PIXXD2
                          Patent
DOCUMENT TYPE:
                          English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                            APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
                                            _____
                            _____
                                          _WO 2001-EP12242 20011023
                            20020502
     WO 2002034777
                       A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG,
             KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
             TD, TG
                             20020506
                                            AU 2002-23640
                                                              20011023
                       A5
     AU 2002023640
                                                         A 20001024
PRIORITY APPLN. INFO.:
                                         IT 2000-MI2299
                                         WO 2001-EP12242 W 20011023
     The present invention is related to fusion proteins (A.beta.-Hsp)
AΒ
     (III) and their use in the treatment or prophylaxis of
     disorders assocd. with an accumulation of .beta.-
     amyloid, specifically in patients with Alzheimer's
     disease. Said fusion proteins are derived from the
     condensation of .beta.-amyloid protein or fragments thereof
     (A.beta.) with a heat shock protein (Hsp). The .beta.-amyloid
     peptide is human .beta.-amyloid peptide (1-39), (1-40) or (1-42);
     and the heat shock protein is Hsp25, Hsp27, Hsp28, Hsp60, Hsp70 or
     Hsp90.
IT
     419018-03-4P
     RL: BPN (Biosynthetic preparation); BSU (Biological study,
     unclassified); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; fusion proteins comprising .beta.-
        amyloid peptide and heat shock protein for
        immunization treatments of Alzheimer
        's disease)
     107761-42-2D, Human .beta.-amyloid peptide(1-42),
IT
     heat shock protein conjugate 131438-79-4D, Human .beta.-
     amyloid peptide(1-40), heat shock protein conjugate
     RL: BSU (Biological study, unclassified); THU (Therapeutic use);
     BIOL (Biological study); USES (Uses)
        (fusion proteins comprising .beta.-amyloid peptide and
        heat shock protein for immunization treatments
        of Alzheimer's disease)
REFERENCE COUNT:
                                THERE ARE 6 CITED REFERENCES AVAILABLE FOR
                          6
                                THIS RECORD. ALL CITATIONS AVAILABLE IN
```

THE RE FORMAT

L8 ANSWER 10 OF 29 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:318788 HCAPLUS

DOCUMENT NUMBER: 137:4739

TITLE: Immunization reverses memory deficits

without reducing brain A.beta. burden in

Alzheimer's disease model

AUTHOR(S): Dodart, J. C.; Bales, K. R.; Gannon, K. S.;

Greene, S. J.; DeMattos, R. B.; Mathis, C.; DeLong, C. A.; Wu, S.; Wu, X.; Holtzman, D. M.;

Paul, S. M.

CORPORATE SOURCE: Neuroscience Discovery Research, Lilly Corporate

Center, Lilly Research Laboratories,

Indianapolis, IN, 46285, USA

SOURCE: Nature Neuroscience (2002), 5(5), 452-457

CODEN: NANEFN; ISSN: 1097-6256

PUBLISHER: Nature America Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The authors have previously shown that chronic **treatment** with the monoclonal antibody m266, which is specific for

amyloid .beta.-peptide (A.beta.), increases plasma concns. of A.beta. and reduces A.beta. burden in the PDAPP transgenic mouse

of A.beta. and reduces A.beta. burden in the PDAPP transgenic mouse model of **Alzheimer's disease (AD)**.

The authors now report that administration of m266 to PDAPP mice can rapidly reverse memory deficits in both an object recognition task and a hole board learning and memory task, but without altering

brain A.beta. burden. The authors also found that an

A.beta./antibody complex was present in both the plasma and the cerebrospinal fluid of m266-treated mice. Our data

indicate that passive immunization with this anti-A.beta.

monoclonal antibody can very rapidly reverse memory impairment in certain learning and memory tasks in the PDAPP mouse model of AD,

owing perhaps to enhanced peripheral clearance and (or)

sequestration of a sol. brain A.beta. species. IT 107761-42-2D, Glycopeptide (human clone 9-110

amyloid A4 peptide moiety), immune complexes-contg.

131438-79-4D, immune complexes-contg.

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(of serum and cerebrospinal fluid in passive immunization

in Alzheimer's disease model)

REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L8 ANSWER 11 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:51195 HCAPLUS

DOCUMENT NUMBER: 136:112669

TITLE: Prevention and treatment of

Alzheimer's disease

INVENTOR(S): Lannfelt, Lars; Naeslund, Jan;

Westlind-Danielsson, Anita; Nilsberth, Camilla

PATENT ASSIGNEE(S): Swed.

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

| PATENT INFORMATION | | |
|--|--|---|
| PATENT NO. | KIND DATE APPLICATION NO. D | DATE |
| | A2 20020117 WO 2001-SE1553 2 A3 20020411 | 20010704 |
| W: AE, A CH, CI ES, F KG, K MN, M SK, S AM, A | AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, BY, KG, KZ, MD, RU, TJ, TM | DZ, EC, EE, IS, JP, KE, MD, MG, MK, SG, SI, SK, YU, ZA, ZW, |
| RW: GH, GI CY, Di | KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, | NL, PT, SE, |
| AU 2001068005 US 2002162129 PRIORITY APPLN. IN | A1 20021031 US 2001-899815 2 EP 2000-202387 A 2 US 2000-217098P P 2 WO 2001-SE1553 W 2 | 20000707 20000710 |
| treatment of A More specific protofibril o active immuni or preventing peptide, A.be as several ap peptide for p IT 389151-08-0 RL: BSU (Biol (prevention Alzheimer' IT 159647-22-0 RL: PAC (Pharm (Biological s | acological activity); THU (Therapeutic use ady); USES (Uses) and treatment of | ity for ivity as well inst said cal study) |
| L8 ANSWER 12 OF ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: | HCAPLUS COPYRIGHT 2003 ACS 2002:43680 HCAPLUS 136:400445 Number of A.beta. inoculations in AF transgenic mice influences antibody microglial activation, and congophil | titers, |
| AUTHOR(S): CORPORATE SOURCE: | levels Wilcock, Donna M.; Gordon, Marcia N. Kenneth E.; Gottschall, Paul E.; Dic Giovanni; Dickey, Chad; Boyett, Kris Jantzen, Paul T.; Connor, Karen E.; Jason; Hardy, John; Morgan, David Alzheimer's Research Laboratory, Dep Pharmacology, University of South Fl | carlo, stal W.; Melachrino, partment of |
| | Tampa, FL, USA | |

DNA and Cell Biology (2001), 20(11), 731-736 CODEN: DCEBE8; ISSN: 1044-5498 SOURCE:

Mary Ann Liebert, Inc. PUBLISHER:

Journal DOCUMENT TYPE: English LANGUAGE:

There have been several reports on the use of .beta.-amyloid AB

(A.beta.) vaccination in different mouse models of

Alzheimer's disease (AD) and its effects

on pathol. and cognitive function. In this report, the histopathol. findings in the APP+PS1 doubly transgenic mouse were compared after three, five, or nine A.beta. inoculations. The no. of inoculations influenced the effects of vaccination on Congo red levels, microglia activation, and anti-A.beta. antibody titers. After three inoculations, the antibody titer of transgenic mice was substantially lower than that found in nontransgenic animals. However, after nine inoculations, the levels were considerably higher in both genotypes and no longer distinguishable . statistically. The no. of inoculations influenced CD45 expression, an indicator of microglial activation. There was an initial upregulation, which was significant after five inoculations, but by nine inoculations, the extent of microglial activation was equiv. to that in mice given control vaccinations. Along with this increased CD45 expression, there was a correlative redn. in staining by Congo red, which stains compact plaques. When data from the mice from all groups were combined, there was a significant correlation between activation of microglia and Congo red levels, suggesting that microglia play a role in the clearance of compact plaque.

107761-42-2, Amyloid .beta. 1-42 IT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (no. of A.beta.1-42 inoculations in transgenic mice carrying amyloid precursor protein and presenilin 1 transgenes influences antibody titers, microglial activation, and congophilic plaque levels)

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2003 ACS ANSWER 13 OF 29

2002:10296 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 136:68700

TITLE:

Tyrosine cross-linked oligomers of amyloid

peptide: Pathology and immunotherapy

Bush, Ashley; Cherny, Robert INVENTOR(S):

Prana Biotechnology Limited, Australia; The PATENT ASSIGNEE(S):

General Hospital Corporation

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. KIND DATE DATE PATENT NO. 20010628 WO 2002000245 **A**1 20020103 WO 2001-AU786 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,

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GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,
             TG
                             20020108
                                            AU 2001-68828
                                                              20010628
     AU 2001068828
                       Α5
PRIORITY APPLN. INFO.:
                                         US 2000-214779P P
                                                              20000628
                                         US 2000-242177P
                                                          Р
                                                              20001023
                                         WO 2001-AU786
                                                           W
                                                              20010628
     This invention relates to methods and compns. for the
AΒ
     treatment or alleviation of Alzheimer's disease
     and of other conditions related to abnormal protein aggregation.
     particular, the invention relates to methods and compns. for the
     immunotherapy of Alzheimer's disease, Parkinson's disease,
     and cataract. In one aspect the invention provides a method of
     prophylaxis, treatment or alleviation of a condition
     characterized by pathol. aggregation and accumulation of a specific
     protein assocd. with oxidative damage and formation of tyrosine
     cross-links, comprising the step of immunizing a subject
     in need of such treatment with an immunizing-ED
     of one or more tyrosine cross-linked compds., and optionally also
     comprising copper ions complexed to the compd. Alternatively
     passive immunization against a tyrosine cross-linked
     compd. may be used.
     107761-42-2D, Glycopeptide (human clone 9-110
IT
     amyloid A4 peptide moiety), tyrosine cross-linked oligomers
     131438-79-4D, tyrosine cross-linked oligomers
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (immunotherapy of Alzheimer's disease with)
                                THERE ARE 8 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                          8
                                THIS RECORD. ALL CITATIONS AVAILABLE IN
                                THE RE FORMAT
                      HCAPLUS COPYRIGHT 2003 ACS
     ANSWER 14 OF 29
1.8
                          2001:827658 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          136:400139
                         Reduced effectiveness of A.beta.1-42
TITLE:
                          immunization in APP transgenic mice with
                          significant amyloid deposition
AUTHOR(S):
                         Das, Pritam; Murphy, M. Paul.; Younkin, Linda
                         H.; Younkin, Steven. G.; Golde, Todd E.
                          Department of Neurosciences, Mayo Clinic
CORPORATE SOURCE:
                          Jacksonville, Jacksonville, FL, 32224, USA
                         Neurobiology of Aging (2001), 22(5), 721-727
SOURCE:
                         CODEN: NEAGDO; ISSN: 0197-4580
                         Elsevier Science Inc.
PUBLISHER:
DOCUMENT TYPE:
                         Journal
                         English
LANGUAGE:
     Vaccinations with A.beta.1-42 have been shown to reduce
     amyloid burden in transgenic models of Alzheimer's
     disease (AD). The authors have further tested the
     efficacy of A.beta.1-42 immunization in the Tg2576 mouse
     model of AD by immunizing one group of mice with minimal
     A.beta. deposition, one group of mice with modest A.beta.
```

deposition, and one group with significant A.beta. deposition. The effects of immunization on A.beta. deposition were examd. using biochem. and immunohistochem. methods. In Tg2576 mice immunized prior to significant amyloid deposition, A.beta.1-42 immunization was highly effective. Biochem. extd. A.beta.40 and A.beta.42 levels were significantly reduced and immunohistochem. plaque load was also reduced. Immunization of mice with modest amts. of pre-existing A.beta. deposits selectively reduced A.beta.42 without altering A.beta.40, although plaque load was reduced. In contrast, in Tg2576 mice with significant pre-existing A.beta. loads, A.beta.1-42 immunization only minimally decreased A.beta.42 levels, whereas no alteration in A.beta.40 levels or in plaque load was obsd. These results indicate that in Tg2576 mice, A.beta.1-42 immunization is more effective at preventing addnl. A.beta. accumulation and does not result in significant clearance of pre-existing A.beta. deposits.

IT 131438-79-4

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)

(reduced effectiveness of A.beta.1-42 immunization in APP transgenic mice with significant amyloid deposition)

IT 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety)

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(reduced effectiveness of A.beta.1-42 immunization in APP transgenic mice with significant amyloid deposition)

APP transgenic mice with significant amyloid deposition)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:661132 HCAPLUS

DOCUMENT NUMBER: 136:261466

TITLE: Immunization with a

nontoxic/nonfibrillar amyloid-.beta. homologous peptide reduces Alzheimer's

disease-associated pathology in

transgenic mice

AUTHOR(S): Sigurdsson, Einar M.; Scholtzova, Henrieta;

Mehta, Pankaj D.; Frangione, Blas; Wisniewski,

Thomas

CORPORATE SOURCE: Department of Neurology, New York University

School of Medicine, New York, NY, 10016, USA American Journal of Pathology (2001), 159(2),

SOURCE: America 439-447

CODEN: AJPAA4; ISSN: 0002-9440

PUBLISHER: American Society for Investigative Pathology

DOCUMENT TYPE: Journal LANGUAGE: English

AB Transgenic mice with brain amyloid-.beta. (A.beta.) plaques immunized with aggregated A.beta.1-42 have reduced cerebral amyloid burden. However, the use of A.beta.1-42 in humans may not be appropriate because it crosses the blood brain barrier, forms toxic fibrils, and can seed fibril formation. We report that immunization in transgenic APP mice (Tg2576) for 7 mo with a sol. nonamyloidogenic, nontoxic A.beta. homologous peptide reduced

cortical and hippocampal brain amyloid burden by 89% and 81%, resp. Concurrently, brain levels of sol. A.beta.1-42 were reduced by 57%. Ramified microglia expressing interleukin-1.beta. assocd. with the A.beta. plaques were absent in the immunized mice indicating reduced inflammation in these animals. These promising findings suggest that immunization with nonamyloidogenic A.beta. derivs. represents a potentially safer therapeutic approach to reduce amyloid burden in Alzheimer's disease, instead of using toxic A.beta. fibrils. 107761-42-2, .beta.-Amyloid 1-42 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immunization with a nontoxic/nonfibrillar amyloid-.beta. homologous peptide reduces Alzheimer's disease) THERE ARE 50 CITED REFERENCES AVAILABLE REFERENCE COUNT: 50 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 16 OF 29 HCAPLUS COPYRIGHT 2003 ACS 2001:590755 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 135:342776 A.beta. immunization: moving A.beta. TITLE: peptide from brain to blood Lee, Virginia M.-Y. AUTHOR(S): Center for Neurodegenerative Disease Research, CORPORATE SOURCE: Department of Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine, Philadelphia, PA, 19104, USA Proceedings of the National Academy of Sciences SOURCE: of the United States of America (2001), 98(16), 8931-8932 CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences PUBLISHER: Journal; General Review DOCUMENT TYPE: English LANGUAGE: A review, with refs., discussing amyloid .beta. (A.beta.), the major component of senile plaques, as a realistic target for developing effective therapies for Alzheimer's disease (AD). The study conducted by DeMattos et al., who provide mechanistic insights on an approach that can lead to the elimination of amyloid deposits in the brains of transgenic mice that develop AD amyloidosis, and the work of Bard et al. are also discussed. Examples of a process for plaque turnover in a transgenic mouse model of amyloidosis are described. 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (immunization with amyloid peptide for treatment of Alzheimer's disease) THERE ARE 18 CITED REFERENCES AVAILABLE REFERENCE COUNT: 18 FOR THIS RECORD. ALL CITATIONS AVAILABLE

ANSWER 17 OF 29 HCAPLUS COPYRIGHT 2003 ACS 2001:545521 HCAPLUS ACCESSION NUMBER:

135:136411 DOCUMENT NUMBER:

ΙT

AB

IΤ

1.8

308-4994 Searcher : Shears

IN THE RE FORMAT

Heat shock/stress protein complexes as TITLE:

vaccines against neurodegenerative

disorders

Srivastava, Pramod K. INVENTOR(S):

University of Connecticut Health Center, USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE _____ _____ WO 2001052890 A1 20010726 WO 2001-US1825 20010118

W: AU, CA, JP

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

NL, PT, SE, TR

· US 2000-489216 A 20000121 PRIORITY APPLN. INFO.:

The present invention relates to pharmaceutical compns. comprising complexes of heat shock proteins (hsps) in assocn. with antigenic mols. for use in treatment and prevention of

neurodegenerative disorders and disease. The invention further relates to methods for the use of such pharmaceutical compns. as immunotherapeutic agents for the treatment and

prevention of neurodegenerative disorders and disease.

107761-42-2, Glycopeptide (human clone 9-110 amyloid

A4 peptide moiety) 131438-79-4

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(heat shock/stress protein-.beta. amyloid complexes as

vaccines against neurodegenerative disorders)

THERE ARE 4 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 4 THIS RECORD. ALL CITATIONS AVAILABLE IN

THE RE FORMAT

ANSWER 18 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:455699 HCAPLUS

DOCUMENT NUMBER: 135:193890

Early-onset amyloid deposition and cognitive TITLE:

deficits in transgenic mice expressing a double mutant form of amyloid precursor protein 695

Chishti, M. Azhar; Yang, Dun-Shen; Janus, AUTHOR(S):

Christopher; Phinney, Amie L.; Horne, Patrick; Pearson, Jacqueline; Strome, Robert; Zuker, Noah; Loukides, James; French, Janet; Turner, Sherry; Lozza, Gianluca; Grilli, Mariagrazia; Kunicki, Suzanne; Morissette, Celine; Paquette, Julie; Gervais, Francine; Bergeron, Catherine;

Fraser, Paul E.; Carlson, George A.; St. George-Hyslop, Peter; Westaway, David

Centre for Research in Neurodegenerative CORPORATE SOURCE: Diseases, University of Toronto, Toronto, ON,

M5S 3H2, Can.

Journal of Biological Chemistry (2001), 276(24), SOURCE:

21562-21570

CODEN: JBCHA3; ISSN: 0021-9258

American Society for Biochemistry and Molecular PUBLISHER:

Biology

DOCUMENT TYPE: LANGUAGE:

Journal English

We have created early-onset transgenic (Tg) models by exploiting the synergistic effects of familial Alzheimer's

disease mutations on amyloid .beta.-peptide

(A.beta.) biogenesis. TgCRND8 mice encode a double mutant form of amyloid precursor protein 695 (KM670/671NL+V717F) under the control of the PrP gene promoter. Thioflavine S-pos.

A.beta. amyloid deposits are present at 3 mo, with dense-cored plaques and neuritic pathol. evident from 5 mo of age. TgCRND8 mice exhibit 3,200-4,600 pmol of A.beta.42 per g brain at age 6 mo, with an excess of A.beta.42 over A.beta.40. High level prodn. of the pathogenic A.beta.42 form of A.beta. peptide was assocd. with an early impairment in TgCRND8 mice in acquisition and learning reversal in the ref. memory version of the Morris water maze,

present by 3 mo of age. Notably, learning impairment in young mice was offset by immunization against A.beta.42.

Amyloid deposition in TgCRND8 mice was enhanced by the expression of presenilin 1 transgenes including familial Alzheimer's disease mutations; for mice also expressing a M146L+L286V presenilin 1 transgene, amyloid

deposits were apparent by 1 mo of age. The Tg mice described here suggest a potential to investigate aspects of Alzheimer's disease pathogenesis, prophylaxis, and therapy within short time frames.

107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) 131438-79-4, Human .beta.-amyloid peptide(1-40)

RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)

(early-onset amyloid deposition and cognitive deficits in transgenic mice expressing a double mutant form of amyloid precursor protein 695)

REFERENCE COUNT:

73 THERE ARE 73 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 19 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:416788 HCAPLUS

DOCUMENT NUMBER:

135:18553

TITLE:

Vaccine for the prevention and treatment of Alzheimer's and amyloid related diseases

INVENTOR(S):

Chalifour, Robert; Hebert, Lise; Kong, Xianqi;

Gervais, Francine

PATENT ASSIGNEE(S):

Neurochem Inc., Can. PCT Int. Appl., 31 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. DATE PATENT NO. KIND DATE _____ ____ 20010607 WO 2000-CA1413 20001129 A2 WO 2001039796

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WO 2001039796
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                            20011206
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             CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ,
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             TJ, TM
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             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD,
             TG
     BR 2000016022
                            20020806
                                           BR 2000-16022
                                                             20001129
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                            20020904
                                           EP 2000-981111
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                            20020712
                                           NO 2002-2531
                                                             20020528
     NO 2002002531
                       Α
                                        US 1999-168594P
                                                         Ρ
                                                           19991129
PRIORITY APPLN. INFO .:
                                        US 2000-724842
                                                           20001128
                                                          Α
                                        WO 2000-CA1413
                                                          W 20001129
     The present invention relates to a stereochem. based "non-self"
AΒ
     antigen vaccine for the prevention and/or
     treatment of Alzheimer's and other amyloid
     related diseases. The present invention provides a
     vaccine for the prevention and treatment
     of Alzheimer's and other amyloid related
     diseases, which overcomes the drawbacks assocd. with using
     naturally occurring peptides, proteins or immunogens.
    226707-64-8P 342877-52-5P 342877-55-8P
TΤ
     342877-58-1P 342877-61-6P 342877-63-8P
     342877-66-1P 342877-69-4P 342877-71-8P
     342877-73-0P 342877-74-1P 342877-75-2P
     342877-97-8P 342878-00-6P 342878-03-9P
     342878-06-2P 342878-09-5P 342896-25-7P
     342896-48-4P
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); PRP (Properties); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (vaccine for prevention and treatment
        of Alzheimer's and amyloid related
        diseases using all-D peptides that elicit immune response
        to amyloid protein)
    ANSWER 20 OF 29 HCAPLUS COPYRIGHT 2003 ACS
                         2001:185883 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         134:236224
TITLE:
                         Agents and compositions and methods utilizing
                         same useful in diagnosing and/or
                         treating or preventing plaque
                         forming diseases
                         Solomon, Beka; Frenkel, Dan; Hanan, Eilat
INVENTOR(S):
                         Ramot University Authority for Applied Research
PATENT ASSIGNEE(S):
                         & Industrial Development, Israel
                         PCT Int. Appl., 120 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
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FAMILY ACC. NUM. COUNT: 2 PATENT INFORMATION:
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| PA' | PATENT NO. KIND DATE | | | | | | | | A | PPLI | CATI | N NC | ο. | DATE | | | | | |
|---------|----------------------|------|--------|-----|-----|-----|-----|-----|------------------------|------|------|------|-----|------|------|-----|-----|------------|---|
| WO | 2001 | 0181 | 69 | A: | 2 | | | | WO 2000-IL518 20000831 | | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | | | |
| | | | | | | | | | | | | | | GD, | | | | | |
| | | - | | - | | | | | | | | | | KZ, | | | | | |
| | | LR. | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | | | |
| | | • | • | | | | - | | | | | | | TR, | | | | | |
| | | | | | | | | | | | | | | KZ, | | | | | |
| | | TJ, | • | • | • | • | • | • | • | • | · | - | · | • | - | | | | |
| | RW: | • | | KE, | LS. | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | | | |
| | | | | | | | | | | | | | | NL, | | | | | |
| | | | | | | | | | | | | | | SN, | | | | | |
| EP | 1180 | | • | - | - | | | | | | | | | | 0021 | | | | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | MC, | ΙE, | | Ot. | * |
| | | SI, | LT, | LV, | FI, | RO | | | | | | | | | | | ص ر | 10, | Y |
| PRIORIT | Y APP | LN. | INFO | . : | | | | 1 | US 1 | 999- | 1524 | 17P | P | 1999 | 0903 | | 9.5 | 09 | 1 |
| | | | | | | | | 1 | US 1 | 999- | 4736 | 53 | Α | 1999 | 1229 | | | 291 M | ι |
| | | | | | | | | 1 | US 2 | -000 | 6299 | 71 | Α | 2000 | 0731 | | 930 | ω . | |
| | | | | | | | | Ĭ | WO 2 | 000- | IL51 | 8 | W | 2000 | 0831 | | • 0 | | |

AB A method of immunizing against plaque forming diseases using display technol. is provided. The method utilizes novel agents, or pharmaceutical compns. for vaccination against plaque forming diseases which rely upon presentation of an antigen or epitope on a display vehicle. The method further includes agents, or pharmaceutical compns. for vaccination against plaque forming diseases, which rely upon presentation of an antibody, or an active portion thereof, on a display vehicle. Whether antigens or antibodies are employed, disaggregation of plaques results from the immunization.

IT 134500-80-4P

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (display vehicles encoding human PrP epitope or anti-.beta. amyloid antibody scFv for diagnosing and/or treating or preventing plaque forming diseases)

L8 ANSWER 21 OF 29 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:900782 HCAPLUS

DOCUMENT NUMBER: 134:55503

TITLE: Immunological control of .beta.-amyloid levels in vivo

INVENTOR(S): Raso, Victor

PATENT ASSIGNEE(S): Boston Biomedical Research Institute, USA

SOURCE: PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2000-US16551 20000615 20001221 WO 2000077178 A1 W: AU, CA, JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE 20011106 20020801 US 2001-992800 US 2002102261 US 2001-992994 20011106 20020926 US 2002136718 A1 US 1999-139408P P 19990616 PRIORITY APPLN. INFO.: US 2000-594366 A3 20000615 The present invention provides an antibody which catalyzes AΒ hydrolysis of .beta.-amyloid at a predetd. amide linkage. The antibody preferentially binds a transition state analog which mimics the transition state adopted by .beta.-amyloid during hydrolysis at a predetd. amide linkage. Specific antibodies provided include those which catalyze the hydrolysis at the amyloid linkages between residues 39 and 40, 40 and 41, and 41 and 42 of .beta.-amyloid. The present antibody also provides a vectorized antibody which is characterized by the ability to cross the blood brain barrier and also catalyze the hydrolysis of .beta.-amyloid. Also provided are methods for sequestering free .beta.-amyloid in the blood stream, for reducing levels of .beta.-amyloid in the brain, for reducing the level of circulating .beta.-amyloid, for preventing the formation of amyloid plaques in the rain and for disaggregating amyloid plaques. Finally, this invention also provides a method of generating antibodies by immunizing an animal with antigen comprised of an epitope which has a statine analog or which utilizes reduced peptide bond analogs to mimic the conformation of a hydrolysis transition state of a polypeptide. IT 134500-80-4 RL: BSU (Biological study, unclassified); PRP (Properties); REM (Removal or disposal); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (antibodies for catalyzing hydrolysis of .beta.-amyloid and reducing .beta.-amyloid in brain) 313474-75-8 IT RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (antibodies for catalyzing hydrolysis of .beta.-amyloid and reducing .beta.-amyloid in brain) REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 22 OF 29 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2000:861516 HCAPLUS DOCUMENT NUMBER: 134:28431 Prevention and treatment of TITLE: amyloidogenic disease Schenk, Dale B. INVENTOR(S): PATENT ASSIGNEE(S): Neuralab Limited, Bermuda PCT Int. Appl., 140 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT:

Searcher: Shears 308-4994

APPLICATION NO. DATE

PATENT INFORMATION:

PATENT NO.

KIND DATE

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WO 2000-US15239 20000601
                            20001207
    WO 2000072876
                       Α2
                            20010503
    WO 2000072876
                       A3
            AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH,
             CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI,
             FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK,
             SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
             BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                     - A2
                           20020313
                                           EP 2000-938075
                                                            20000601
     EP 1185296
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO
                                                                       x 6-1999
                                                             20000601
     BR 2000011103
                      Α
                            20020319
                                           BR 2000-11103
                                                             20011126
     NO 2001005758
                            20020130
                                           NO 2001-5758
                       Α
PRIORITY APPLN. INFO .:
                                        US 1999-137010P
                                                         Ρ
                                                             19990601
                                        WO 2000-US15239 W 20000601
     The authors discloses methods for immunotherapy of amyloid
AB
    diseases, including Alzheimer's disease,
     prion diseases, and familial amyloid
    neuropathies. In one example, Alzheimer's disease
     -prone mice were immunized with amyloid peptide
     (A.beta.1-42). In contrast to control mice,
     treated mice exhibited a lack of amyloid plaques, neuritic
    pathol., and astrocytosis. In a second example, Alzheimer
     's disease-prone mice were passively immunized
     with antibodies to amyloid peptides. Treated
    mice exhibited a significant decrease in cerebral A.beta. levels and
     a redn. in amyloid load.
    107761-42-2, Glycopeptide (human clone 9-110 amyloid
ΙT
    A4 peptide moiety) 312263-74-4
     RL: PRP (Properties)
        (unclaimed sequence; prevention and treatment
        of amyloidogenic disease)
    ANSWER 23 OF 29
                     HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER:
                         2000:552560 HCAPLUS
                         133:236580
DOCUMENT NUMBER:
                         Peripherally administered antibodies against
TITLE:
                         amyloid .beta.-peptide enter the central
                         nervous system and reduce pathology in a mouse
                         model of Alzheimer disease
                         Bard, Frederique; Cannon, Catherine; Barbour,
AUTHOR(S):
                         Robin; Burke, Rae-Lyn; Games, Dora; Grajeda,
                         Henry; Guido, Teresa; Hu, Kang; Huang, Jiping;
                         Johnson-Wood, Kelly; Khan, Karen; Kholodenko,
                         Dora; Lee, Mike; Lieberburg, Ivan; Motter, Ruth;
                         Nguyen, Minh; Soriano, Ferdie; Vasquez, Nicki;
                         Weiss, Kim; Welch, Brent; Seubert, Peter;
                         Schenk, Dale; Yednock, Ted
CORPORATE SOURCE:
                         Elan Pharmaceuticals, South San Francisco, CA,
                         94080, USA
                         Nature Medicine (New York) (2000), 6(8), 916-919
SOURCE:
                         CODEN: NAMEFI; ISSN: 1078-8956
PUBLISHER:
                         Nature America Inc.
DOCUMENT TYPE:
                         Journal
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English LANGUAGE: One hallmark of Alzheimer disease is the accumulation of amyloid .beta.-peptide in the brain and its deposition as plaques. Mice transgenic for an amyloid .beta. precursor protein (APP) mini-gene driven by a platelet-derived (PD) growth factor promoter (PDAPP mice), which overexpress one of the disease-linked mutant forms of the human amyloid precursor protein, show many of the pathol. features of Alzheimer disease, including extensive deposition of extracellular amyloid plaques, astrocytosis and neuritic dystrophy. Active immunization of PDAPP mice with human amyloid .beta.-peptide reduces plaque burden and its assocd. pathologies. Several hypotheses have been proposed regarding the mechanism of this response. Here the authors report that peripheral administration of antibodies against amyloid .beta.-peptide, was sufficient to reduce amyloid burden. Despite their relatively modest serum levels, the passively administered antibodies were able to enter the central nervous system, decorate plaques and induce clearance of preexisting amyloid. When examd. in an ex vivo assay with sections of PDAPP or Alzheimer disease brain tissue, antibodies against amyloid .beta.-peptide triggered microglial cells to clear plaques through Fc receptor-mediated phagocytosis and subsequent peptide degrdn. These results indicate that antibodies can cross the blood-brain barrier to act directly in the central nervous system and should be considered as a therapeutic approach for the treatment of Alzheimer disease and other neurol. disorders. 107761-42-2, Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (plaque clearance in Alzheimer's disease model is promoted by antibodies to) THERE ARE 10 CITED REFERENCES AVAILABLE REFERENCE COUNT: 10 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 24 OF 29 HCAPLUS COPYRIGHT 2003 ACS 2000:513524 HCAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 133:129886 Application of a viral complement-inhibitory TITLE: protein in the treatment and diagnosis of Alzheimer's disease Kotwal, Girish J.; Daly, James, IV INVENTOR(S): University of Louisville Research Foundation, PATENT ASSIGNEE(S): Inc., USA PCT Int. Appl., 96 pp. SOURCE: CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: KIND DATE PATENT NO. APPLICATION NO. DATE WO 2000043027 A1 20000727 _____ WO 2000-US1115 20000119 W: AU, CA, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE US 1999-116328P P 19990119 PRIORITY APPLN. INFO.: The present invention provides a novel treatment for senile dementia (Alzheimer's Type), comprising administering an anti-complement protein to a patient in need of such treatment in an amt. sufficient to inhibit the complement cascade and thereby inhibit the prodn. or enlargement of amyloid plaques in the brain of the patient. The present invention further provides pharmaceutical compns. comprising anti-complement protein, or derivs. thereof, and/or pharmaceutically acceptable salts thereof in a variety of unique pharmaceutical dosage forms. 134548-35-9, 652-751-Glycoprotein (human clone .lambda.APCP168i4 amyloid A4 precursor protein moiety reduced) RL: PRP (Properties) (unclaimed protein sequence; application of a viral complement-inhibitory protein in the treatment and diagnosis of Alzheimer's disease) THERE ARE 4 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 4 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 25 OF 29 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1999:466239 HCAPLUS DOCUMENT NUMBER: 131:227367 Immunization with amyloid TITLE: -. beta. attenuates Alzheimer disease-like pathology in the PDAPP mouse Schenk, Dale; Barbour, Robin; Dunn, Whitney; AUTHOR(S): Gordon, Grace; Grajeda, Henry; Guido, Teresa; Hu, Kang; Huang, Jiping; Johnson-Wood, Kelly; Khan, Karen; Kholodenko, Dora; Lee, Mike; Liao, Zhenmei; Lieberburg, Ivan; Motter, Ruth; Mutter, Linda; Soriano, Ferdie; Shopp, George; Vasquez, Nicki; Vandevert, Christopher; Walker, Shannan; Wogulis, Mark; Yednock, Ted; Games, Dora; Seubert, Peter Elan Pharmaceuticals, South San Francisco, CA, CORPORATE SOURCE: 94080, USA Nature (London) (1999), 400(6740), 173-177 SOURCE: CODEN: NATUAS: ISSN: 0028-0836 Macmillan Magazines PUBLISHER: Journal DOCUMENT TYPE: English LANGUAGE: Amyloid-.beta. peptide (A.beta.) seems to have a central AB role in the neuropathol. of Alzheimer's disease (AD). Familial forms of the disease have been linked to mutations in the amyloid precursor protein (APP) and the presenilin genes. Disease-linked mutations in these genes result in increased prodn. of the 42-amino-acid form of the peptide (A.beta.42), which is the predominant form found in the amyloid plaques of Alzheimer's disease. The PDAPP transgenic mouse, which overexpresses mutant human APP (in which the amino acid at position 717 is phenylalanine instead of the normal valine), progressively develops many of the neuropathol. hallmarks of Alzheimer's disease in an age- and

In the present study, transgenic brain-region-dependent manner. animals were immunized with A.beta.42, either before the onset of AD-type neuropathologies (at 6 wk of age) or at an older age (11 mo), when amyloid-.beta. deposition and several of the subsequent neuropathol. changes were well established. We report that immunization of the young animals essentially prevented the development of .beta.-amyloid-plaque formation, neuritic dystrophy and astrogliosis. of the older animals also markedly reduced the extent and progression of these AD-like neuropathologies. Our results raise the possibility that immunization with amyloid -. beta. may be effective in preventing and

treating Alzheimer's disease.

ΙT 107761-42-2, Glycopeptide (human clone 9-110 amyloid

A4 peptide moiety)

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(immunization with amyloid-.beta. attenuates Alzheimer disease-like pathol. in PDAPP mouse)

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2003 ACS ANSWER 26 OF 29

ACCESSION NUMBER:

1999:375416 HCAPLUS

DOCUMENT NUMBER:

131:27965

TITLE:

Prevention and treatment of amyloidogenic disease, especially

Alzheimer's disease, based on induction of anti-amyloid immune

response

INVENTOR(S):

Schenk, Dale B.

PATENT ASSIGNEE(S):

Athena Neurosciences, Inc., USA

SOURCE:

PCT Int. Appl., 113 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. KIND DATE APPLICATION NO. DATE | | | | | | | | | | | | | | | | |
|---|-----------------------|-----|-----|-------------|-----|-------|------|------------------------|-----|-------|-------|-------|-----|-------|------|-----|
| WO | 9927 | 944 | | A: | 1 | 19990 | 0610 | | W | o 199 | 98-US | 52538 | 36 | 19981 | 130 | |
| | W: | AL, | AM, | ΑT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, |
| | | | | | | FI, | | | | | | | | | | |
| | | KE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, |
| | | MN, | MW, | MX, | NO, | NΖ, | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, |
| | | ТJ, | TM, | TR, | TT, | UA, | UG, | US, | US, | UŻ, | VN, | YU, | ZW, | AM, | AZ, | BY, |
| | | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | | | | | | |
| | RW: | GH, | GM, | ΚE, | LS, | MW, | SD, | SZ, | ŪG, | ZW, | AT, | BE, | CH, | CY, | DE, | DK, |
| | | ES, | FI, | FR, | GB, | GR, | ΙE, | ΙΤ, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, |
| | | CG, | CI, | CM, | GA, | GN, | GW, | ΜL, | MR, | NE, | SN, | TD, | ΤG | | | |
| | 2312 | | | | | 19990 | | | | | | | | 1998: | 1130 | |
| | U 9917061 A1 19990616 | | | | | | | | | | | 1998: | | | | |
| | | | | | | | | ZA 1998-10932 19981130 | | | | | | | | |
| EP | P 1033996 | | | A1 20000913 | | | | | E | P 199 | 98-90 | 6183 | 3 | 19981 | 1130 | |
| | R: | ΑT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | NL, | SE, | MC, |

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PT, IE, SI, LT, LV, FI, RO
                                            BR 1998-15357
                                                             19981130
     BR 9815357
                            20001024
                       Α
                            20020129
     JP 2002502802
                       T2
                                            JP 2000-522929
                                                             19981130
                                           NO 2000-2784
                            20000731
                                                             20000531
     NO 2000002784
                       Α
                                        US 1997-67740P
                                                          P
                                                             19971202
PRIORITY APPLN. INFO.:
                                        US 1998-80970P
                                                          P
                                                             19980407
                                        WO 1998-US25386 W
                                                            19981130
     The invention provides compns. and methods for treatment
AB
     of amyloidogenic diseases. The methods entail administering an
     agent that induces a beneficial immune response against an amyloid
     deposit in the patient. The methods are particularly useful for
     prophylactic and therapeutic treatment of
     Alzheimer's disease. In such methods, a suitable agent is
     A.beta. peptide or an antibody thereto.
     107761-42-2, Glycopeptide (human clone 9-110 amyloid
IT
     A4 peptide moiety)
     RL: BAC (Biological activity or effector, except adverse); BPR
     (Biological process); BSU (Biological study, unclassified); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (prevention and treatment of amyloidogenic
        disease, esp. Alzheimer's disease,
        based on induction of anti-amyloid immune response)
IT
     131438-79-4 226917-46-0D, IgG conjugates
     RL: BAC (Biological activity or effector, except adverse); BSU
     (Biological study, unclassified); PRP (Properties); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (prevention and treatment of amyloidogenic
        disease, esp. Alzheimer's disease,
        based on induction of anti-amyloid immune response)
                               THERE ARE 2 CITED REFERENCES AVAILABLE FOR
REFERENCE COUNT:
                         2
                               THIS RECORD. ALL CITATIONS AVAILABLE IN
                               THE RE FORMAT
                      HCAPLUS COPYRIGHT 2003 ACS
     ANSWER 27 OF 29
ACCESSION NUMBER:
                         1999:212578 HCAPLUS
DOCUMENT NUMBER:
                         131:57660
TITLE:
                         Pro-inflammatory complement activation by the
                         A.beta. peptide of Alzheimer's disease
                         is biologically significant and can be blocked
                         by vaccinia virus complement
                         control protein
                         Daly, James; Kotwal, Girish J.
AUTHOR(S):
                         Department of Microbiology and Immunology,
CORPORATE SOURCE:
                         University of Louisville School of Medicine,
                         Louisville, KY, 40292, USA
SOURCE:
                         Neurobiology of Aging (1999), Volume Date 1998,
                         19(6), 619-627
                         CODEN: NEAGDO; ISSN: 0197-4580
PUBLISHER:
                         Elsevier Science Inc.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
     The amyloid plaque is the hallmark of Alzheimer
     's disease (AD). The transmembrane domain and a
     portion of the C-terminus (A.beta.) of the amyloid precursor
   . protein, are known to form the nucleus of the amyloid plaque.
     has been demonstrated recently, using in vitro assays, that the
    A.beta. peptide can activate both the classical (antibody-
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independent) and alternate pathways of complement activation. proposed complement activation is due to the binding of A.beta. to the complement components Clq and C3, resp., which initiate formation of the proinflammatory C5a and C5b-9 membrane attack complex. In this report, the authors have investigated the in vitro findings for the likely complement-dependent proinflammatory properties of the Alzheimer's disease A.beta. peptide. The authors have performed expts. using congenic C5-deficient and C5-sufficient mice injected with synthetic A.beta. and recombinant polypeptide (C-100) contg. A.beta.. Injection of C-100 into C5-sufficient mice induced a clear increase in the no. of polymorphonuclear cells (neutrophils) at the site of injection due to complement activation and the subsequent release of proinflammatory chemtoactic factors. In sharp contrast, the C5-deficient mice did not show any increase in cellular influx. vaccinia virus complement control protein, an inhibitor of both the classical and alternate pathway can down-regulate the biol. significant activation of complement by A.beta., as demonstrated by an in vitro immunoassay. The therapeutic down-regulation of A.beta.-caused complement activation could greatly alleviate the progression of some of the chronic neurodegeneration characteristic of Alzheimer's

134548-35-9, 652-751-Glycoprotein (human clone IΤ .lambda.APCP168i4 amyloid A4 precursor protein moiety reduced)

RL: PRP (Properties)

(amino acid sequence; pro-inflammatory complement activation by A.beta. peptide of Alzheimer's disease is

biol. significant and can be blocked by vaccinia virus complement control protein)

REFERENCE COUNT:

THERE ARE 35 CITED REFERENCES AVAILABLE 35 FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 28 OF 29 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

1991:598502 HCAPLUS

DOCUMENT NUMBER:

115:198502

TITLE:

Assays and reagents for amyloid deposition and screening agents for

treating Alzheimer's disease amyloidosis

INVENTOR(S):

Cordell, Barbara; Wolf, David

PATENT ASSIGNEE(S):

California Biotechnology, Inc., USA

PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PAT | CENT | NO. | | KIND | DATE | APPLICATION NO. | DATE |
|-----|------|-----|-----|---------|----------|------------------------|----------|
| | | | | | | | |
| WO | 9104 | 339 | | A1 | 19910404 | WO 1990-US5155 | 19900912 |
| | | ΑU, | | | | | |
| | RW: | ΑT, | BE, | CH, DE, | DK, ES, | FR, GB, IT, LU, NL, SE | |
| CA | 2065 | 404 | | AA | 19910319 | CA 1990-2065404 | 19900912 |
| ΑU | 9064 | 311 | | A1 | 19910418 | AU 1990-64311 | 19900912 |

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B2
                            19930923
     AU 641434
     EP 493470
                      A1
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                                           EP 1990-914284
                                                            19900912
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                      T2
                            19930428
                                           JP 1990-513439
                                                            19900912
     JP 05502368
                            19930622
                                           US 1991-785142
                                                            19911029
     US 5221607
                       A
PRIORITY APPLN. INFO.:
                                        US 1989-408767
                                                            19890918
                                        WO 1990-US5155
                                                            19900912
    An in vitro tissue culture-based assay for amyloid
AB
     deposition specific for Alzheimer's disease and
     immunol. assay reagents for screening agents capable of intervention
     in Alzheimer's disease amyloidosis are
     disclosed. Cell lines capable of expressing a gene encoding
     .beta.-amyloid protein under conditions suitable to produce the
     .beta.-amyloid protein as an insol., preamyloid aggregate are used.
    Amyloid plaque core DNA (pUV1:A42 and pUV1-A99) were constructed and
     used to make recombinant vaccinia viruses VV:A42 and
     VV:A99. Neuronal cell lines were infected with the recombinant
     viruses and then slides were prepd. for immunocytochem. The VV:A99
     and VV:A42 infected cells displayed strong reactivity in the form of
     large deposit-like structures which were cell assocd.
    117313-01-6, 597-695-Glycoprotein (human clone 9-110
IT
     amyloid A4 precursor protein moiety reduced)
    RL: PRP (Properties)
        (amino acid sequence of, Alzheimer's disease
        drugs screening in relation to)
    ANSWER 29 OF 29 HCAPLUS COPYRIGHT 2003 ACS
                         1989:2189 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         110:2189
                         Diagnosis and treatment of
TITLE:
                         Alzheimer's disease: cloning
                         and expression of DNA encoding .beta.-
                         amyloid-related protein
                         Greenberg, Barry D.; Fuller, Forrest H.; Ponte,
INVENTOR(S):
                         Phyllis A.
PATENT ASSIGNEE(S):
                         California Biotechnology, Inc., USA
SOURCE:
                         PCT Int. Appl., 85 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO.
                                                            DATE
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                                           WO 1987-US2953
    WO 8803951
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                           19880602
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        RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
    AU 8783290
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                                                            19871112
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                            19880720
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                                           JP 1988~500173
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Searcher: Shears 308-4994

AT 1987-310029

19871112

JP 02501796 JP 07079702

AT 169673

B4

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19950830

19980815

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PRIORITY APPLN. INFO.:
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                                        US 1987-8810
                                                            19870130
                                        US 1987-87002
                                                            19870818
                                        WO 1987-US2953
                                                            19871112
     DNA encoding human .beta.-amyloid-related protein is cloned and
AΒ
     expressed in bacteria and mammalian cells. The DNA and antibodies
     to the protein may be used to diagnose Alzheimer's
     disease. Immunogenic fragments of the protein may be used to
     treat the disease. A cDNA encoding amino acids 1-751 of
     .beta.-amyloid-related protein, and genomic DNA contg. DNA encoding
     the 1st 18 amino acids of the .beta.-amyloid core protein (according
     to Masters) preceded by methionine were cloned and sequenced.
     Plasmids for prodn. of .beta.-amyloid-related proteins in
     Escherichia coli and recombinant vaccinia virus for its
     prodn. in CV-1 cells were prepd. Antibodies were raised against the
     recombinant protein. The cloned DNA was used in Northern blotting
     expts. to distinguish genetic variants of .beta.-amyloid-related
     protein mRNA species.
     117312-63-7, Glycopeptide (human clone .lambda.SMW9 amyloid
IT
     A4 peptide moiety) 117312-93-3 117312-96-6
     117312-99-9, 599-695-Glycoprotein (human clone 9-110 amyloid
     A4 precursor protein moiety reduced) 117313-00-5
     117313-01-6, 597-695-Glycoprotein (human clone 9-110 amyloid
     A4 precursor protein moiety reduced) 117910-30-2,
     Glycoprotein (human clone .lambda.APCP168i4 amyloid A4 precursor
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     RL: PRP (Properties)
        (amino acid sequence of and cloning in Escherichia coli of DNA
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CN
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     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-qlutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysyl-L-lysyl-L-isoleucyl-L-seryl-L-isoleucyl-L-
   threonyl-L-.alpha.-glutamyl-L-isoleucyl-L-lysylglycyl-L-valyl-L-
     isoleucyl-L-valyl-L-histidyl-L-arginyl-L-isoleucyl-L-.alpha.-
     glutamyl-L-threonyl-L-isoleucyl-L-leucyl- (9CI) (CA INDEX NAME)
CI
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SQL
     48
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RN
     L-Aspartic acid, L-.alpha.-aspartyl-L-alanyl-L-.alpha.-glutamyl-L-
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     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycylglycyl-L-phenylalanyl-L-phenylalanyl-L-
     leucyl-L-leucyl-L-threonyl-L-arginyl-L-isoleucyl-L-leucyl-L-threonyl-
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     INDEX NAME NOT YET ASSIGNED
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     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     qlutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
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CN
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     tyrosyl-L-.alpha.-qlutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-
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CI
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CN
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CI
     MAN
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CN
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CI
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Searcher: Shears 308-4994

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770

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       401 KHRERMSQVM REWEEAERQA KNLPKADKKA VIQHFQEKVE SLEQEAANER
       451 QQLVETHMAR VEAMLNDRRR LALENYITAL QAVPPRPRHV FNMLKKYVRA
       501 EQKDRQHTLK HFEHVRMVDP KKAAQIRSQV MTHLRVIYER MNQSLSLLYN
       551 VPAVAEEIQD EVDELLQKEQ NYSDDVLANM ISEPRISYGN DALMPSLTET
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       651 TTRPGSGLTN IKTEEISEVK MDAEFRHDSG YEVHHQKLVF FAEDVGSNKG
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     phenylalanyl- (9CI) (CA INDEX NAME)
     12
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     phenylalanyl-L-arginyl-L-histidyl-L-.alpha.-aspartyl-L-serylglycyl-L-
     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     qlutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaqinyl-L-lysylglycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-
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L10 ANSWER 10 OF 47 REGISTRY COPYRIGHT 2003 ACS
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L10

RN

CN

SQL

SEQ

RN

CN

CN

CI

SOL

SEO

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     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-
     leucyl-L-methionyl-L-valylglycylglycyl-L-valyl-L-valyl-L-isoleucyl-L-
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OTHER NAMES:
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     419018-03-4 REGISTRY
RN
     Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) fusion
CN
     protein with heat-shock protein HSP 70 (synthetic) (9CI) (CA INDEX
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OTHER NAMES:
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CI
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       151 YLGEDITDAV ITTPAYFNDA QRQATKDAGQ IAGLNVLRIV NEPTAAALAY
       201 GLDKGEKEQR ILVFDLGGGT FDVSLLEIGE GVVEVRATSG DNHLGGDDWD
       251 QRVVDWLVDK FKGTSGIDLT KDKMAMQRLR EAAEKAKIEL SSSQSTSINL
       301 PYITVDADKN PLFLDEQLTR AEFQRITQDL LDRTRKPFQS VIADTGISVS
       351 EIDHVVLVGG STRMPAVTDL VKELTGGKEP NKGVNPDEVV AVGAALQAGV
       401 LKGEVKDVLL LDVTPLSLGI ETKGGVMTRL IERNTTIPTK RSETFTTADD
       451 NQPSVQIQVY QGEREIAAHN KLLGSFELTG IPPAPRGIPQ IEVTFDIDAN
       501 GIVHVTAKDK GTGKENTIRI QEGSGLSKED IDRMIKDAEA HAEEDRKRRE
       551 EADVRNQAET LVYQTEKFVK EQREAEGGSK VPEDTLNKVD AAVAEAKAAL
       601 GGSDISAIKS AMEKLGQESQ ALGQAIYEAA QAASQATGAA HPGGEPGGAH
       651 PGSADDVVDA EVVDDGREAK
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L10 ANSWER 12 OF 47 REGISTRY COPYRIGHT 2003 ACS
RN
     389151-08-0 REGISTRY
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CN
     phenylalanyl-L-arginyl-L-histidyl-L-.alpha.-aspartyl-L-serylglycyl-L-
     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanylglycyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-asparaginyl-
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L-lysylqlycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-leucyl-L-
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     (CA INDEX NAME)
CI
     MAN
SOL
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L10
    ANSWER 13 OF 47 REGISTRY COPYRIGHT 2003 ACS
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     342896-48-4 REGISTRY
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CN
     phenylalanyl-D-arginyl-D-histidyl-D-.alpha.-aspartyl-D-serylglycyl-D-
     tyrosyl-D-.alpha.-glutamyl-D-valyl-D-histidyl-D-histidyl-D-
     glutaminyl-D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-D-
     alanyl-D-.alpha.-glutamyl-D-.alpha.-aspartyl-D-valylglycyl-D-seryl-D-
     asparaginyl-D-lysylglycyl-D-alanyl-D-isoleucyl-D-isoleucylglycyl-D-
     leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
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CI
SOL
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**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
REFERENCE
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    ANSWER 14 OF 47 REGISTRY COPYRIGHT 2003 ACS
L10
RN
     342896-25-7 REGISTRY
     D-Alanine, D-.alpha.-aspartyl-D-alanyl-D-.alpha.-glutamyl-D-
CN
     phenylalanyl-D-arginyl-D-histidyl-D-.alpha.-aspartyl-D-serylglycyl-D-
     tyrosyl-D-.alpha.-glutamyl-D-valyl-D-histidyl-D-histidyl-D-
     qlutaminyl-D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-D-
     alanyl-D-.alpha.-glutamyl-D-.alpha.-aspartyl-D-valylglycyl-D-seryl-D-
     asparaginyl-D-lysylglycyl-D-alanyl-D-isoleucyl-D-isoleucylglycyl-D-
     leucyl-D-methionyl-D-valylglycylglycyl-D-valyl-D-valyl-D-isoleucyl-
     (9CI) (CA INDEX NAME)
OTHER NAMES:
     1: PN: WOO139796 SEQID: 1 claimed sequence
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CI
     MAN
SOL
     42
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SEO
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L10 ANSWER 15 OF 47 REGISTRY COPYRIGHT 2003 ACS
     342878-09-5 REGISTRY
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REFERENCE
L10 ANSWER 16 OF 47 REGISTRY COPYRIGHT 2003 ACS
     342878-06-2 REGISTRY
RN
     D-Alaninamide, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-3-cyclohexyl-
CN
     D-alanyl- (9CI) (CA INDEX NAME)
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REFERENCE
            2:
               135:18553
L10 ANSWER 17 OF 47 REGISTRY COPYRIGHT 2003 ACS
     342878-03-9 REGISTRY
RN
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CN
     D-alanyl- (9CI) (CA INDEX NAME)
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     56: PN: WOO139796 SEQID: 56 claimed protein
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SQL
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           ====
HITS AT:
           1 - 4
REFERENCE
           1: 137:108295
            2:
REFERENCE
               135:18553
L10 ANSWER 18 OF 47 REGISTRY COPYRIGHT 2003 ACS
RN
     342878-00-6 REGISTRY
     D-Alaninamide, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-tyrosyl-
CN
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     (9CI)
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CN
     53: PN: WO0139796 SEQID: 53 claimed protein
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SEO
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HITS AT: 1-4

REFERENCE 1: 137:108295

REFERENCE 2: 135:18553

L10 ANSWER 19 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 342877-97-8 REGISTRY

CN D-Alaninamide, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-tryptophyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 50: PN: WO0139796 SEQID: 50 claimed protein

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REFERENCE 2: 135:18553

L10 ANSWER 20 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 342877-75-2 REGISTRY

CN D-Glutamine, D-histidyl-D-histidyl-D-glutaminyl-D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-D-alanyl- (9CI) (CA INDEX NAME)

OTHER NAMES: CN 27: PN: WO0139796 SEQID: 27 claimed protein

SQL 10

SEQ 1 HHQKLVFFAQ

HITS AT: 4-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:108295

====

REFERENCE 2: 135:18553

L10 ANSWER 21 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN **342877-74-1** REGISTRY

CN D-Glutamamide, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-D-alanyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 26: PN: WOO139796 SEQID: 26 claimed protein

SQL 7

SEQ 1 KLVFFAQ

HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:108295

REFERENCE 2: 135:18553

L10 ANSWER 22 OF 47 REGISTRY COPYRIGHT 2003 ACS 342877-73-0 REGISTRY RN D-Glutamine, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-CN D-alanyl- (9CI) (CA INDEX NAME) OTHER NAMES: 25: PN: WOO139796 SEQID: 25 claimed protein CN SQL SEQ 1 KLVFFAQ ==== HITS AT: 1 - 4**RELATED SEQUENCES AVAILABLE WITH SEQLINK** 1: 137:108295 REFERENCE REFERENCE 2: 135:18553 L10 ANSWER 23 OF 47 REGISTRY COPYRIGHT 2003 ACS **342877-71-8** REGISTRY RN D-Phenylalaninamide, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl- (9CI) CN (CA INDEX NAME) OTHER NAMES: CN23: PN: WOO139796 SEQID: 23 claimed protein SQL 5 SEO 1 KLVFF HITS AT: 1 - 4**RELATED SEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 137:108295 REFERENCE 2: 135:18553 L10 ANSWER 24 OF 47 REGISTRY COPYRIGHT 2003 ACS RN **342877-69-4** REGISTRY D-Phenylalaninamide, D-lysyl-D-leucyl-D-valyl- (9CI) (CA INDEX CN NAME) OTHER NAMES: 21: PN: WO0139796 SEQID: 21 claimed protein CN SQL SEQ 1 KLVF HITS AT: 1 - 4**RELATED SEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 137:108295 REFERENCE 2: 135:18553 L10 ANSWER 25 OF 47 REGISTRY COPYRIGHT 2003 ACS RN **342877-66-1** REGISTRY D-Alaninamide, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-

Searcher :

308-4994

Shears

CN

phenylalanyl- (9CI) (CA INDEX NAME) OTHER NAMES: 18: PN: WO0139796 SEQID: 18 claimed protein CN SQL 6 1 KLVFFA SEQ ==== HITS AT: 1 - 4**RELATED SEQUENCES AVAILABLE WITH SEQLINK** 1: 137:108295 REFERENCE REFERENCE 2: 135:18553 L10 ANSWER 26 OF 47 REGISTRY COPYRIGHT 2003 ACS **342877-63-8** REGISTRY RN D-Phenylalanine, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl- (9CI) (CA CN INDEX NAME) OTHER NAMES: 15: PN: WO0139796 SEQID: 15 claimed protein CN SQL 5 SEQ 1 KLVFF ==== HITS AT: 1 - 4**RELATED SEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 137:167565 137:108295 REFERENCE 2: REFERENCE 3: 135:18553 L10 ANSWER 27 OF 47 REGISTRY COPYRIGHT 2003 ACS **342877-61-6** REGISTRY RN D-Phenylalanine, D-lysyl-D-leucyl-D-valyl- (9CI) (CA INDEX NAME) CN OTHER NAMES: 13: PN: WOO139796 SEQID: 13 claimed protein CN SQL 4 SEQ 1 KLVF HITS AT: 1 - 4**RELATED SEQUENCES AVAILABLE WITH SEQLINK** 1: 137:108295 REFERENCE REFERENCE 2: 135:18553 L10 ANSWER 28 OF 47 REGISTRY COPYRIGHT 2003 ACS RN **342877-58-1** REGISTRY D-Alanine, D-lysyl-D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-CN phenylalanyl- (9CI) (CA INDEX NAME) OTHER NAMES:

Searcher: Shears 308-4994

10: PN: WOO139796 SEQID: 10 claimed protein

```
SQL 7
```

SEQ 1 KKLVFFA

HITS AT: 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:108295

REFERENCE 2: 135:18553

L10 ANSWER 29 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN **342877-55-8** REGISTRY

CN D-Alanine, D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-(9CI) (CA INDEX NAME)

OTHER NAMES:

CN 7: PN: WO0139796 SEQID: 7 claimed protein

SQL 6

SEQ 1 KLVFFA

HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:108295

REFERENCE 2: 136:139864

REFERENCE 3: 135:18553

L10 ANSWER 30 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN **342877-52-5** REGISTRY

CN D-Lysine, D-.alpha.-aspartyl-D-alanyl-D-.alpha.-glutamyl-D-phenylalanyl-D-arginyl-D-histidyl-D-.alpha.-aspartyl-D-serylglycyl-D-tyrosyl-D-.alpha.-glutamyl-D-valyl-D-histidyl-D-histidyl-D-glutaminyl-D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-D-alanyl-D-.alpha.-glutamyl-D-.alpha.-aspartyl-D-valylglycyl-D-seryl-D-asparaginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 4: PN: WO0139796 SEQID: 4 claimed protein

SQL 28

SEQ 1 DAEFRHDSGY EVHHQKLVFF AEDVGSNK

====

HITS AT: 16-19

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:108295

REFERENCE 2: 135:18553

L10 ANSWER 31 OF 47 REGISTRY COPYRIGHT 2003 ACS

RN 313474-75-8 REGISTRY

CN Glycinamide, L-cysteinyl-L-tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-glutaminyl-L-lysyl-L-leucyl-L-valyl-L-

```
phenylalanyl-L-phenylalanyl-L-alanyl-L-.alpha.-glutamyl-L-.alpha.-
     aspartyl-L-valyl- (9CI) (CA INDEX NAME)
SQL
SEO
         1 CYEVHHOKLV FFAEDVG
           8-11
HITS AT:
REFERENCE
            1:
                134:55503
    ANSWER 32 OF 47 REGISTRY COPYRIGHT 2003 ACS
T.10
RN
     312263-74-4 REGISTRY
     L-Histidine, L-asparaginyl-L-histidyl-L-histidyl-L-histidyl-L-
CN
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycylglycyl-L-cysteinyl-L-cysteinyl-L-glutaminyl-
     L-glutaminyl- (9CI)
                         (CA INDEX NAME)
OTHER NAMES:
     33: PN: WO0072876 PAGE: 74 unclaimed sequence
CN
SQL
         1 NHHHQKLVFF AEDVGSNKGG CCQQH
SEQ
HITS AT:
REFERENCE
            1:
                134:28431
    ANSWER 33 OF 47 REGISTRY COPYRIGHT 2003 ACS
L10
     226917-46-0 REGISTRY
RN
     L-Cysteine, N-acetyl-L-histidyl-L-histidyl-L-glutaminyl-L-lysyl-L-
CN
     leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-alanyl-L-alpha.-
     glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-asparaginyl-L-
     lysylglycylglycyl- (9CI) (CA INDEX NAME)
SQL
         1 HHOKLVFFAE DVGSNKGGC
SEO
           4 - 7
HITS AT:
REFERENCE
            1:
                131:27965
L10
    ANSWER 34 OF 47 REGISTRY COPYRIGHT 2003 ACS
RN
     226707-64-8 REGISTRY
     D-Valine, D-.alpha.-aspartyl-D-alanyl-D-.alpha.-glutamyl-D-
CN
     phenylalanyl-D-arginyl-D-histidyl-D-.alpha.-aspartyl-D-serylglycyl-D-
     tyrosyl-D-.alpha.-glutamyl-D-valyl-D-histidyl-D-histidyl-D-
     glutaminyl-D-lysyl-D-leucyl-D-valyl-D-phenylalanyl-D-phenylalanyl-D-
     alanyl-D-.alpha.-glutamyl-D-.alpha.-aspartyl-D-valylglycyl-D-seryl-D-
     asparaginyl-D-lysylqlycyl-D-alanyl-D-isoleucyl-D-isoleucylglycyl-D-
     leucyl-D-methionyl-D-valylglycylglycyl-D-valyl- (9CI) (CA INDEX
     NAME)
OTHER NAMES:
CN
     2: PN: WO0139796 SEQID: 2 claimed protein
CI
SQL
     40
         1 DAEFRHDSGY EVHHQKLVFF AEDVGSNKGA IIGLMVGGVV
SEQ
```

```
16-19
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
               135:18553
REFERENCE
            1:
                131:30581
REFERENCE
            2:
L10 ANSWER 35 OF 47 REGISTRY COPYRIGHT 2003 ACS
     159647-22-0 REGISTRY
RN
     L-Valine, L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
CN
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    L-Valine, N-[N-[N-[N-[N-[N-[N-(N-L-lysyl-L-leucyl)-L-valyl]-L-
     phenylalanyl]-L-phenylalanyl]-L-alanyl]-L-.alpha.-glutamyl]-L-
     .alpha.-aspartyl]-
SOL
         1 KLVFFAEDV
SEQ
HITS AT:
           1 - 4
REFERENCE
            1:
                136:112669
REFERENCE
            2:
               122:78292
L10 ANSWER 36 OF 47 REGISTRY COPYRIGHT 2003 ACS
     134548-35-9 REGISTRY
RN
     652-751-Amyloid precursor protein (human clone .lambda.APCP168i4)
CN
     (9CI) (CA INDEX NAME)
OTHER NAMES:
    1: PN: WO0183811 SEQID: 1 claimed protein
CN
     4: PN: WO0043027 SEQID: 14 unclaimed protein
CN
     596-695-Glycoprotein (human clone 9-110 amyloid A4 precursor)
CN
     652-751-Glycoprotein (human clone .lambda.APCP168i4 amyloid A4
CN
     precursor protein moiety reduced)
     Amyloid precursor protein (human clone pAPPc C-terminal fragment)
CN
    MAN
CI
    100
SQL
         1 MDAEFRHDSG YEVHHQKLVF FAEDVGSNKG AIIGLMVGGV VIATVIVITL
SEQ
        51 VMLKKKQYTS IHHGVVEVDA AVTPEERHLS KMQQNGYENP TYKFFEQMQN
HITS AT:
           17-20
REFERENCE
            1:
               135:354682
                133:129886
REFERENCE
            2:
REFERENCE
            3:
                131:57660
REFERENCE
                128:307169
            4:
REFERENCE
            5:
                115:23683
L10 ANSWER 37 OF 47 REGISTRY COPYRIGHT 2003 ACS
     134500-80-4 REGISTRY
RN
     L-Threonine, L-.alpha.-aspartyl-L-alanyl-L-.alpha.-glutamyl-L-
CN
```

```
phenylalanyl-L-arginyl-L-histidyl-L-.alpha.-aspartyl-L-serylglycyl-L-
     tyrosyl-L-.alpha.-qlutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-
     leucyl-L-methionyl-L-valylglycylglycyl-L-valyl-L-valyl-L-isoleucyl-L-
     alanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     .beta.-Amyloid A4(1-43)
     1: PN: US5985242 SEQID: 1 unclaimed protein
CN
     1: PN: US6319498 SEQID: 1 unclaimed protein
CN
CN
     1: PN: WO0028331 PAGE: 32 unclaimed protein
CN
     1: PN: WOO118169 SEQID: 3 claimed protein
     274: PN: WO0069900 SEQID: 954 unclaimed protein
CN
     2: PN: WO0042166 PAGE: 29 unclaimed protein
CN
     3: PN: US5985242 SEQID: 1 claimed protein
CN
     3: PN: WO0142306 SEQID: 4 unclaimed protein
CN
     596-638-Glycoprotein (human clone 9-110 amyloid A4 precursor protein
CN
    moiety reduced)
CI
     MAN
SQL
     43
         1 DAEFRHDSGY EVHHQKLVFF AEDVGSNKGA IIGLMVGGVV IAT
SEO
HITS AT:
           16-19
**RELATED SEOUENCES AVAILABLE WITH SEQLINK**
REFERENCE
            1:
                136:245164
REFERENCE
            2:
                136:181848
REFERENCE
            3:
                136:148989
REFERENCE
            4:
                136:116689
REFERENCE
            5:
                136:665
REFERENCE
            6:
                135:255546
REFERENCE
            7:
                135:120638
REFERENCE
            8:
                135:60157
REFERENCE
            9:
                134:305336
REFERENCE 10:
                134:236224
L10 ANSWER 38 OF 47 REGISTRY COPYRIGHT 2003 ACS
     131438-79-4 REGISTRY
RN
     L-Valine, L-.alpha.-aspartyl-L-alanyl-L-.alpha.-glutamyl-L-
CN
     phenylalanyl-L-arginyl-L-histidyl-L-.alpha.-aspartyl-L-serylglycyl-L-
     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     glutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-
     leucyl-L-methionyl-L-valylglycylglycyl-L-valyl- (9CI) (CA INDEX
     NAME)
```

```
OTHER NAMES:
     .beta.-Amyloid peptide(1-40)
     .beta.-Amyloid protein(1-40)
CN
     1: PN: JP2001247600 SEQID: 1 unclaimed protein
CN
     1: PN: WO0152890 SEQID: 1 claimed protein
CN
     276: PN: WO0069900 SEQID: 956 unclaimed protein
CN
     2: PN: WO0142306 SEQID: 2 unclaimed protein
CN
     54: PN: WO0038706 SEQID: 14 unclaimed protein
CN
     7: PN: US6043283 FIGURE: 17 claimed protein
CN
     Amyloid .beta. peptide(1-40) (synthetic)
CN
     Human .beta.-amyloid peptide-(1-40)
CN
CI
     MAN
SQL
     40
         1 DAEFRHDSGY EVHHOKLVFF AEDVGSNKGA IIGLMVGGVV
SEO
           16-19
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                138:11335
REFERENCE
            1:
            2:
                138:3197
REFERENCE
REFERENCE
            3:
                138:3183
                137:367804
REFERENCE
            4:
                137:350697
REFERENCE
            5:
                137:350612
REFERENCE
            6:
REFERENCE
            7:
                137:336165
REFERENCE
            8:
                137:336164
               137:325632
REFERENCE
            9:
REFERENCE 10: 137:308734
L10 ANSWER 39 OF 47 REGISTRY COPYRIGHT 2003 ACS
     117910-30-2 REGISTRY
RN
     Glycoprotein (human clone .lambda.APCP168i4 amyloid A4 precursor
CN
     protein moiety reduced) (9CI) (CA INDEX NAME)
OTHER NAMES:
     2: PN: WO0182967 SEQID: 4 unclaimed protein
CN
     57: PN: WO0149098 SEQID: 57 claimed sequence
CN
     57: PN: WO0150829 SEQID: 57 claimed sequence
CN
     63: PN: WO0149097 SEQID: 57 claimed protein
CN
     65: PN: WO0123533 SEQID: 57 unclaimed protein
CN
     Amyloid precursor protein (human 751-amino acid isoform)
CN
     Amyloid precursor protein (human isoform APP751)
CN
     MAN
CI
SQL
    751
         1 MLPGLALLLL AAWTARALEV PTDGNAGLLA EPQIAMFCGR LNMHMNVQNG
SEQ
        51 KWDSDPSGTK TCIDTKEGIL QYCQEVYPEL QITNVVEANQ PVTIQNWCKR
       101 GRKQCKTHPH FVIPYRCLVG EFVSDALLVP DKCKFLHQER MDVCETHLHW
```

```
151 HTVAKETCSE KSTNLHDYGM LLPCGIDKFR GVEFVCCPLA EESDNVDSAD
       201 AEEDDSDVWW GGADTDYADG SEDKVVEVAE EEEVAEVEEE EADDDEDDED
       251 GDEVEEEAEE PYEEATERTT SIATTTTTTT ESVEEVVREV CSEQAETGPC
       301 RAMISRWYFD VTEGKCAPFF YGGCGGNRNN FDTEEYCMAV CGSAIPTTAA
       351 STPDAVDKYL ETPGDENEHA HFQKAKERLE AKHRERMSQV MREWEEAERQ
       401 AKNLPKADKK AVIOHFOEKV ESLEQEAANE RQQLVETHMA RVEAMLNDRR
       451 RLALENYITA LQAVPPRPRH VFNMLKKYVR AEQKDRQHTL KHFEHVRMVD
       501 PKKAAQIRSQ VMTHLRVIYE RMNQSLSLLY NVPAVAEEIQ DEVDELLQKE
       551 ONYSDDVLAN MISEPRISYG NDALMPSLTE TKTTVELLPV NGEFSLDDLQ
       601 PWHSFGADSV PANTENEVEP VDARPAADRG LTTRPGSGLT NIKTEEISEV
       651 KMDAEFRHDS GYEVHHQKLV FFAEDVGSNK GAIIGLMVGG VVIATVIVIT
                             === =
       701 LVMLKKKOYT SIHHGVVEVD AAVTPEERHL SKMQQNGYEN PTYKFFEQMQ
       751 N
           668-671
HITS AT:
**RELATED SEOUENCES AVAILABLE WITH SEQLINK**
                135:352818
REFERENCE
REFERENCE
                135:104271
REFERENCE
                135:104269
            3:
REFERENCE
                135:104268
            4:
REFERENCE
            5:
                134:277406
REFERENCE
            6:
               126:127855
REFERENCE
            7:
                118:17443
REFERENCE
            8:
                116:253564
REFERENCE
            9:
                115:189727
REFERENCE 10: 115:23683
L10 ANSWER 40 OF 47 REGISTRY COPYRIGHT 2003 ACS
     117313-01-6 REGISTRY
     597-695-Glycoprotein (human clone 9-110 amyloid A4 precursor protein
    moiety reduced) (9CI) (CA INDEX NAME)
OTHER NAMES:
    Glycoprotein, amyloid A4, pre-(human 99-amino acid carboxyl terminal
     fragment)
    MAN
    99
         1 DAEFRHDSGY EVHHQKLVFF AEDVGSNKGA IIGLMVGGVV IATVIVITLV
        51 MLKKKQYTSI HHGVVEVDAA VTPEERHLSK MQQNGYENPT YKFFEQMQN
           16-19
HITS AT:
           1: 123:282774
REFERENCE
REFERENCE
            2:
                122:209218
REFERENCE
               116:253564
            3:
```

RN

CN

CI

SQL

SEQ

4: 115:198502 REFERENCE

5: 110:2189 REFERENCE

L10 ANSWER 41 OF 47 REGISTRY COPYRIGHT 2003 ACS

117313-00-5 REGISTRY RN

599-695-Glycoprotein (human clone 9-110 amyloid A4 precursor protein CN moiety reduced), 599-L-methionine- (9CI) (CA INDEX NAME)

CI MAN SQL 97

1 MFRHDSGYEV HHQKLVFFAE DVGSNKGAII GLMVGGVVIA TVIVITLVML SEQ

51 KKKQYTSIHH GVVEVDAAVT PEERHLSKMQ QNGYENPTYK FFEQMQN

14-17 HITS AT:

1: 110:2189 REFERENCE

L10 ANSWER 42 OF 47 REGISTRY COPYRIGHT 2003 ACS

====

117312-99-9 REGISTRY RN

599-695-Glycoprotein (human clone 9-110 amyloid A4 precursor protein CN moiety reduced) (9CI) (CA INDEX NAME)

CI MAN

SQL 97

1 EFRHDSGYEV HHQKLVFFAE DVGSNKGAII GLMVGGVVIA TVIVITLVML SEO

51 KKKOYTSIHH GVVEVDAAVT PEERHLSKMQ QNGYENPTYK FFEQMQN

14-17 HITS AT:

REFERENCE 1: 110:2189

L10 ANSWER 43 OF 47 REGISTRY COPYRIGHT 2003 ACS

====

117312-96-6 REGISTRY RN

603-695-Glycoprotein (human clone 9-110 amyloid A4 precursor protein CN moiety reduced), 603-L-methionine- (9CI) (CA INDEX NAME)

CI MAN

SQL 93

1 MSGYEVHHQK LVFFAEDVGS NKGAIIGLMV GGVVIATVIV ITLVMLKKKQ SEQ

51 YTSIHHGVVE VDAAVTPEER HLSKMQQNGY ENPTYKFFEQ MQN

10-13 HITS AT:

1: 110:2189 REFERENCE

L10 ANSWER 44 OF 47 REGISTRY COPYRIGHT 2003 ACS

= ===

RN **117312-93-3** REGISTRY

604-695-Glycoprotein (human clone 9-110 amyloid A4 precursor protein CN moiety reduced), 604-L-methionine- (9CI) (CA INDEX NAME)

CI MAN

SQL 92

1 MGYEVHHQKL VFFAEDVGSN KGAIIGLMVG GVVIATVIVI TLVMLKKKQY SEO

51 TSIHHGVVEV DAAVTPEERH LSKMQQNGYE NPTYKFFEQM QN

HITS AT: 9-12

> 308-4994 Searcher : Shears

```
REFERENCE
            1: 110:2189
L10 ANSWER 45 OF 47 REGISTRY COPYRIGHT 2003 ACS
     117312-63-7 REGISTRY
RN
     Glycopeptide (human clone .lambda.SMW9 amyloid A4 peptide moiety)
CN
     (9CI) (CA INDEX NAME)
CI
     MAN
     42
SQL
         1 EFGHDSGFEV RHQKLVFFAE DVGSNKGAII GLMVGGVVIA TV
SEQ
                         ====
HITS AT: 14-17
            1: 110:2189
REFERENCE
L10 ANSWER 46 OF 47 REGISTRY COPYRIGHT 2003 ACS
     109770-29-8 REGISTRY
RN
     1-28-Glycopeptide (human clone 9-110 amyloid A4 peptide moiety)
CN
     (9CI) (CA INDEX NAME)
OTHER NAMES:
     1-28-Peptide .beta. (human amyloid)
CN
     12: PN: WO0228351 SEQID: 12 unclaimed sequence
CN
     279: PN: WO0069900 SEQID: 959 unclaimed sequence
CN
     285: PN: WO0069900 SEQID: 965 unclaimed sequence
CN
     2: PN: WO0069456 SEQID: 11 unclaimed sequence
CN
     2: PN: WO0197841 SEQID: 2 unclaimed sequence
CN
     312: PN: WO0069900 SEQID: 992 unclaimed sequence
CN
     37: PN: WOO200883 PAGE: 25 unclaimed sequence
CN
     3: PN: WO0200885 SEQID: 3 unclaimed sequence
CN
     3: PN: WO0218585 SEQID: 2 unclaimed sequence
CN
     6: PN: US6043283 FIGURE: 17 claimed protein
CN
     7: PN: WO02053761 SEQID: 7 unclaimed sequence
CN
     8: PN: WO0238177 SEQID: 7 claimed sequence
CN
     98: PN: WOO109309 PAGE: 23 unclaimed sequence
ĊN
CN
     Human .beta.-amyloid peptide(1-28)
SQL
     28
         1 DAEFRHDSGY EVHHQKLVFF AEDVGSNK
SEQ
           16-19
HITS AT:
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                137:306930
REFERENCE
            1:
                137:107986
REFERENCE
            2:
                137:103906
REFERENCE
            3:
REFERENCE
            4:
                137:75823
REFERENCE
            5:
                136:384964
REFERENCE
            6:
                136:320642
REFERENCE
            7:
               136:290805
```

```
136:227876
REFERENCE
            8:
REFERENCE
            9:
                136:98025
REFERENCE 10:
                136:80862
L10 ANSWER 47 OF 47 REGISTRY COPYRIGHT 2003 ACS
RN
     107761-42-2 REGISTRY
     Glycopeptide (human clone 9-110 amyloid A4 peptide moiety) (9CI)
CN
     (CA INDEX NAME)
OTHER NAMES:
     181: PN: WO0185208 SEQID: 174 unclaimed protein
CN
     1: PN: WO0068263 FIGURE: 1 claimed protein
CN
     1: PN: WO0069456 SEQID: 10 unclaimed protein
CN
CN
     1: PN: WO0182967 SEQID: 2 unclaimed protein
     1: PN: WO0246222 SEQID: 1 claimed protein
CN
     21: PN: WO0142306 SEQID: 3 unclaimed protein
CN
     275: PN: WO0069900 SEQID: 955 unclaimed protein
CN
     2: PN: JP2001247600 SEQID: 2 unclaimed protein
CN
     2: PN: WO0152890 SEQID: 2 claimed protein
CN
     2: PN: WO0246222 SEQID: 1 claimed protein
CN
     34: PN: WO0072876 PAGE: 24 unclaimed protein
CN
     52: PN: WO0038706 SEQID: 10 unclaimed protein
CN
     5: PN: WO0132694 SEQID: 5 claimed protein
CN
     6: PN: US6043283 FIGURE: 17 claimed protein
CN
CN
     97: PN: WO0109309 PAGE: 23 unclaimed protein
CN
     Amyloid .beta. 1-42
     Glycoprotein, amyloid A4 (human clone .lambda.APCP168i4 N-terminal
CN
     42-amino-acid fragment)
     Human .beta.-amyloid peptide-(1-42)
CN
     L-Alanine, L-.alpha.-aspartyl-L-alanyl-L-.alpha.-glutamyl-L-
CN
     phenylalanyl-L-arginyl-L-histidyl-L-.alpha.-aspartyl-L-serylglycyl-L-
     tyrosyl-L-.alpha.-glutamyl-L-valyl-L-histidyl-L-histidyl-L-
     qlutaminyl-L-lysyl-L-leucyl-L-valyl-L-phenylalanyl-L-phenylalanyl-L-
     alanyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-valylglycyl-L-seryl-L-
     asparaginyl-L-lysylglycyl-L-alanyl-L-isoleucyl-L-isoleucylglycyl-L-
     leucyl-L-methionyl-L-valylglycylglycyl-L-valyl-L-valyl-L-isoleucyl-
CN
     Peptide .beta. (human amyloid)
CI
     MAN
SQL
     42
         1 DAEFRHDSGY EVHHQKLVFF AEDVGSNKGA IIGLMVGGVV IA
SEO
TS AT:
         16-19
**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
                138:12933
REFERENCE
            1:
REFERENCE
            2:
                138:3442
                138:3187
REFERENCE
            3:
                138:3139
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            4:
                137:383644
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            5:
REFERENCE
            6:
                137:383298
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REFERENCE 7: 137:368578

REFERENCE 8: 137:351513

REFERENCE 9: 137:350697

REFERENCE 10: 137:350680

FILE 'HOME' ENTERED AT 12:22:10 ON 06 JAN 2003